

CLAIMS

1 1. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising
2 the steps of:
3 generating a command via a first computer at a first location;
4 transmitting the command to a second computer at a second location over a remote data link;
5 sending the command from the second computer to a digital signal processor in one of a
6 telephone and the hearing aid;
7 outputting a test tone from the digital signal processor based on the ~~output~~ command to a user of
8 the telephone wearing the hearing aid;
9 receiving a user response to the test tone over the remote data link; and
10 adjusting the hearing aid based on the user response to the test tone, wherein:
11 said adjusting step comprises the steps of:
12 transmitting the user response to the first computer over the remote data link;
13 retrieving a stored audiogram from memory based on ~~[[the]]~~ an accuracy of the
14 response; and
15 uploading the audiogram into the hearing aid of the user over the remote data
16 link; and
17 said audiogram is a compensation curve for adjusting performance characteristics of the
18 hearing aid based on the user response.

1 2. (currently amended) The method of claim 1, wherein said command is sent from the
2 second computer to the digital signal processor as a DTMF tone.

1 3. (currently amended) The method of claim 1, wherein said receiving step comprises
2 inputting a response to the ~~outputted~~ command into the second computer via a keyboard attached to the
3 computer.

1 4. (original) The method of claim 1, wherein said receiving step comprises inputting a
2 response to the command via a key pad on the telephone.

1 5-6. (canceled)

1 7. (currently amended) The method of claim 1, wherein said adjusting step further
2 comprises determining ~~[[an]]~~ the accuracy of the user response.

1 8. (currently amended) A method for adjusting a hearing aid of a user, comprising the steps
2 of:
3 generating a command via a computer;
4 sending the command to a digital signal processor in one of a telephone and the hearing aid;
5 outputting a test tone from the digital signal processor based on the command to the user of the
6 telephone wearing the hearing aid;
7 receiving a response to the test tone by the user;
8 storing the response to the test tone by the user in the computer;
9 retrieving a stored audiogram from memory based on ~~[[the]]~~ an accuracy of the stored response;
10 and
11 uploading the audiogram into the hearing aid of the user.

1 9. (currently amended) The method of claim 8, wherein said command is sent from the
2 computer to the digital signal processor as a DTMF tone.

1 10. (currently amended) The method of claim 8, wherein said receiving step comprises
2 inputting a response to the ~~output~~ command into the computer via a keyboard attached to the computer.

1 11. (original) The method of claim 8, wherein said receiving step comprises inputting a
2 response to the command via a keypad on the telephone.

1 12. (canceled)

1 13. (previously presented) The method of claim 8, wherein said audiogram is a
2 compensation curve for adjusting performance characteristics of the hearing aid based on the user
3 response.

1 14. (original) The method of claim 8, wherein the command is generated by a first computer
2 at a first location and is received by a second computer at a second location, and said second computer
3 sends the command to the digital processor.

1 15. (original) The method of claim 14, wherein the response is stored in the first computer.

1 16. (original) The method of claim 14, wherein the response is stored in the second
2 computer.

1 17. (original) The method of claim 14, wherein the response is stored in the first and second
2 computers.

1 18. (original) The method of claim 8, wherein the digital signal processor is located in the
2 hearing aid and step of sending the command to the digital signal processor is by a wireless link.

1 19. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising
2 the steps of:

3 generating a command via a first computer at a first location;
4 transmitting the command to a second computer at a second location over a remote data link;
5 sending the command from the second computer to a digital signal processor in one of a
6 telephone and the hearing aid;
7 outputting a test tone from the digital signal processor based on the ~~output~~ command to a user of
8 the telephone wearing the hearing aid;
9 receiving a user response to the test tone over the remote data link; and
10 adjusting the hearing aid based on the user response to the test tone, wherein said receiving step
11 comprises inputting a response to the ~~outputted~~ command into the second computer via a keyboard
12 attached to the computer.

1 20. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising
2 the steps of:

3 generating a command via a first computer at a first location;
4 transmitting the command to a second computer at a second location over a remote data link;
5 sending the command from the second computer to a digital signal processor in one of a
6 telephone and the hearing aid;
7 outputting a test tone from the digital signal processor based on the ~~output~~ command to a user of
8 the telephone wearing the hearing aid;
9 receiving a user response to the test tone over the remote data link; and

10 adjusting the hearing aid based on the user response to the test tone, wherein said adjusting step
11 comprises the steps of:
12 transmitting the user response to the first computer over the remote data link;
13 determining an accuracy of the user response;
14 retrieving a stored audiogram from memory based on the accuracy of the response; and
15 uploading the stored audiogram into the hearing aid of the user over the remote data link.

1 21. (currently amended) A method for adjusting a hearing aid of a user, comprising the steps
2 of:
3 generating a command via a computer;
4 sending the command to a digital signal processor in one of a telephone and the hearing aid;
5 outputting a test tone from the digital signal processor based on the command to the user of the
6 telephone wearing the hearing aid;
7 receiving a response to the test tone by the user; and
8 storing the response to the test tone by the user in the computer, wherein said receiving step
9 comprises inputting a response to the ~~output~~ command into the computer via a keyboard attached to the
10 computer.

B 1 22. (previously presented) A method for adjusting a hearing aid of a user, comprising the
2 steps of:
3 generating a command via a computer;
4 sending the command to a digital signal processor in one of a telephone and the hearing aid;
5 outputting a test tone from the digital signal processor based on the command to the user of the
6 telephone wearing the hearing aid;
7 receiving a response to the test tone by the user; and
8 storing the response to the test tone by the user in the computer, wherein the command is
9 generated by a first computer at a first location and is received by a second computer at a second
10 location, and said second computer sends the command to the digital processor.

1 23. (previously presented) A method for adjusting operations of a hearing aid of a user,
2 wherein:
3 a computer system transmits a sequence of one or more non-audible commands to a processor in
4 one of a telephone and the hearing aid;
5 the processor causes an audible test tone to be generated in response to receipt of each command,
6 wherein:
7 when the processor is in the telephone, the telephone generates each test tone; and
8 when the processor is in the hearing aid, the hearing aid generates each test tone;
9 the computer system receives a response to each of one or more of the test tones from the user;
10 the computer system processes the one or more responses from the user to generate parameters
11 for controlling the operations of the hearing aid; and
12 the computer system transmits the parameters to the hearing aid to adjust the operations of the
13 hearing aid.

1 24. (previously presented) The invention of claim 23, wherein the processor is in the
2 telephone and the telephone generates each test tone.

1 25. (previously presented) The invention of claim 24, wherein the user enters each response
2 via a key pad on the telephone and the telephone transmits the user's responses to the computer system.

1 26. (previously presented) The invention of claim 24, wherein the user enters each response
2 via a keyboard attached to the computer system.

1 27. (previously presented) The invention of claim 24, wherein the computer system
2 transmits the commands to the processor in the telephone using DTMF signaling.

1 28. (previously presented) The invention of claim 23, wherein the processor is in the
2 hearing aid and the hearing aid generates each test tone.

1 29. (previously presented) The invention of claim 28, wherein the user enters each response
2 via a key pad on the telephone and the telephone transmits the user's responses to the computer system.

1 30. (previously presented) The invention of claim 28, wherein the user enters each response
2 via a keyboard attached to the computer system.

1 31. (previously presented) The invention of claim 23, wherein:
2 the computer system comprises a local computer co-located with the user; and
3 the local computer transmits the commands to the processor and receives the user's responses.

1 32. (previously presented) The invention of claim 31, wherein the local computer generates
2 and transmits the parameters to the hearing aid.

1 33. (previously presented) The invention of claim 31, wherein:
2 the computer system further comprises a remote computer located remotely from the user;
3 the local computer transmits the user's responses to the remote computer;
4 the remote computer generates and transmits the parameters to the local computer; and
5 the local computer transmits the parameters to the hearing aid.

1 34. (previously presented) The invention of claim 33, wherein the remote computer
2 transmits each command to the local computer.

1 35. (previously presented) The invention of claim 23, wherein:
2 the computer system comprises a remote computer located remotely from the user; and
3 the remote computer transmits the commands to the processor, receives the user's responses, and
4 generates and transmits the parameters to the hearing aid.

1 36. (previously presented) A hearing aid for a user, the hearing aid comprising a processor
2 adapted to:
3 receive a sequence of one or more non-audible commands from a computer system;
4 cause an audible test tone to be generated by the hearing aid in response to receipt of each
5 command, wherein:
6 the computer system receives a response to each of one or more of the test tones from the
7 user; and
8 the computer system processes the one or more responses from the user to generate
9 parameters for controlling operations of the hearing aid; and
10 receive the parameters from the computer system to adjust the operations of the hearing aid.

1 37. (previously presented) The invention of claim 36, wherein the processor receives the
2 command sequence and the parameters directly from the computer system.

1 38. (previously presented) The invention of claim 36, wherein the processor receives the
2 command sequence and the parameters from the computer system via a telephone.

1 39. (previously presented) The invention of claim 38, wherein the command sequence and
2 the parameters are transmitted to the processor from the telephone using DTMF signaling.

1 40. (previously presented) A telephone for adjusting operations of a hearing aid of a user,
2 the telephone comprising a processor adapted to:
3 receive a sequence of one or more non-audible commands from a computer system; and
4 cause an audible test tone to be generated by the telephone in response to receipt of each
5 command, wherein:
6 the computer system receives a response to each of one or more of the test tones from the
7 user; and
8 the computer system processes the one or more responses from the user to generate
9 parameters for controlling the operations of the hearing aid.

1 41. (previously presented) The invention of claim 40, wherein the telephone is further
2 adapted to receive the parameters from the computer system and to transmit the parameters to the hearing
3 aid to adjust the operations of the hearing aid.

B 1 42. (previously presented) The invention of claim 41, wherein the telephone is adapted to
2 transmit the parameters to the hearing aid using DTMF signaling.

1 43. (previously presented) The invention of claim 40, wherein the telephone is further
2 adapted to:
3 receive each response from the user via a key pad on the telephone; and
4 transmit the user's responses to the computer system.

1 44. (previously presented) A computer system for adjusting operations of a hearing aid of a
2 user, wherein the computer system is adapted to:
3 transmit a sequence of one or more non-audible commands to a processor in one of a telephone
4 and the hearing aid, wherein the processor causes an audible test tone to be generated in response to
5 receipt of each command, wherein:
6 when the processor is in the telephone, the telephone generates each test tone; and
7 when the processor is in the hearing aid, the hearing aid generates each test tone;
8 receive a response to each of one or more of the test tones from the user;
9 process the one or more responses from the user to generate parameters for controlling the
10 operations of the hearing aid; and
11 transmit the parameters to the hearing aid to adjust the operations of the hearing aid.

1 45. (previously presented) The invention of claim 44, wherein the processor is in the
2 telephone and the telephone generates each test tone.

1 46. (previously presented) The invention of claim 45, wherein the user enters each response
2 via a key pad on the telephone and the computer system is adapted to receive the user's responses from
3 the telephone.

1 47. (previously presented) The invention of claim 45, wherein the computer system is
2 adapted to receive each response from the user via a keyboard attached to the computer system.

- 1 48. (previously presented) The invention of claim 45, wherein the computer system is
2 adapted to transmit the commands to the processor in the telephone using DTMF signaling.
- 1 49. (previously presented) The invention of claim 44, wherein the processor is in the
2 hearing aid and the hearing aid generates each test tone.
- 1 50. (previously presented) The invention of claim 49, wherein the user enters each response
2 via a key pad on the telephone and the computer system is adapted to receive the user's responses from
3 the telephone.
- 1 51. (previously presented) The invention of claim 49, wherein the computer system is
2 adapted to receive each response from the user via a keyboard attached to the computer system.
- 1 52. (previously presented) The invention of claim 44, wherein:
2 the computer system comprises a local computer co-located with the user; and
3 the local computer is adapted to transmit the commands to the processor and receive the user's
4 responses.
- B 1 53. (previously presented) The invention of claim 52, wherein the local computer is adapted
2 to generate and transmit the parameters to the hearing aid.
- 1 54. (previously presented) The invention of claim 52, wherein:
2 the computer system further comprises a remote computer located remotely from the user;
3 the local computer is adapted to transmit the user's responses to the remote computer;
4 the remote computer is adapted to generate and transmit the parameters to the local computer;
5 and
6 the local computer is adapted to transmit the parameters to the hearing aid.
- 1 55. (previously presented) The invention of claim 54, wherein the remote computer is
2 adapted to transmit each command to the local computer.
- 1 56. (previously presented) The invention of claim 44, wherein:
2 the computer system comprises a remote computer located remotely from the user; and
3 the remote computer is adapted to transmit the commands to the processor, receive the user's
4 responses, and generate and transmit the parameters to the hearing aid.